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Natural, Artifactual, and Moral Goodness

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Abstract In *Natural Goodness*, Philippa Foot (2001) aims to provide an account of moral evaluation that is both naturalistic and cognitivist. She argues that moral evaluation is a variety of natural evaluation in the sense that moral judgments of human action and character have the same "grammar" or "conceptual structure" as natural judgments of the goodness (e.g., health) of plants and animals. We argue that Foot's naturalist project can succeed, but not in the way she envisions, because her central thesis that moral evaluation is a variety of natural evaluation is not entirely correct. We show that both moral and natural evaluation are species of *kind evaluation,* which encompasses moral, natural, and artifact evaluation. Kind evaluation is a *form* of evaluation, according to which things are evaluated *qua* members of a kind, in such a way that the kind into which something is classified informs the standards of evaluation (or norms) for things of that kind. Because the source of the normative standards for moral evaluation is different from the source of the normative standards for natural evaluation, moral evaluation is not a species of natural evaluation. However, both are varieties of kind evaluation. This account of moral evaluation as a variety of kind evaluation is still an effective response to non-naturalism and to non-cognitivism.

Keywords Kind evaluation · Moral evaluation · Natural goodness · Normativity · Philippa Foot

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1 Introduction

In *Natural Goodness*, Philippa Foot (2001) aims to provide a naturalistic account of ethics. "Naturalism" and its cognates are slippery philosophical terms, but crucially what Foot has in mind is "to break really radically both with G.E. Moore's anti-naturalism and with subjectivist theories such as emotivism and prescriptivism that have been seen as clarifications and developments of Moore's original thought." (Foot 2001: 5) This break is facilitated by an account of moral evaluation that shares a "conceptual structure" (Foot 2001: 5) with a type of biological evaluation. Foot claims that "[j]udgements of goodness and badness can have…a special 'grammar' when the subject belongs to a living thing, whether plant, animal, or human being" (Foot 2001: 26), and that moral judgments of human action and character share this "grammar." She argues that we have ways of evaluating living things as members of their form of life, and that in making moral judgments about human action and character we are evaluating human beings in this way. Foot aims to show, *contra* Moore, that moral goodness is a type of natural phenomenon; and, *contra* subjectivists and non-cognitivists, that moral evaluation is not merely the expression of attitudes, feelings, or commitments to actions, but is a cognitive judgment based on the relationship between the human form of life and individual human beings.

We believe Foot's naturalist project can succeed, but not in the way she envisions. We will show that her central thesis that moral evaluation shares a conceptual structure with a type of biological evaluation is correct, but that her claim that moral evaluation is a species of natural evaluation (as she conceives it) is not correct. We show this by developing a unified account of *kind evaluation*, which incorporates not only moral and natural evaluation, but also artifact evaluation. Thus, moral evaluation shares a conceptual structure with a type of biological evaluation because they are both instances of kind evaluation, and not because moral evaluation is an instance of natural evaluation (as Foot conceives it). An explanation of moral evaluation as a species of kind evaluation can still play a role in naturalizing ethics, though the ethical naturalism will look rather different than on Foot's view.

In Sect. 2 we explicate Foot's understanding of the common "grammar" or "conceptual structure" of natural and moral evaluation, and introduce the idea of *kind evaluation* as the basis of this common structure. Section 3 shows how kind evaluation works for artifacts, including how it depends on establishing a standard associated with a kind into which an artifact is classified. In Sect. 4 we demonstrate that Foot's conception of natural evaluation has the same structure or form as artifactual kind evaluation and discuss the differences in content (or the source of normative standards) between artifact and natural evaluation. In Sect. 5 we argue that moral evaluation is a species of kind evaluation, though one in which the source of the content (or normative standards) is significantly different from that found in either artifact or natural evaluation. In Sect. 6 we discuss why our account is as much a response to Moore, subjectivism and non-cognitivism as is Foot's.

2 Kind Evaluation

Foot begins by accepting Peter Geach's (Geach 1956) point that "good," "bad," and related evaluative terms are "attributive" adjectives. That is, they operate only in conjunction with a common noun, so that something might be a bad *book* and a good *soporific*, but not good or bad simpliciter. (In contrast, something might be red simpliciter). Central for Foot is the idea that evaluative judgments are made against the background of a kind to which a thing belongs, normally expressed with a common noun. When we evaluate a living thing, we see it as an instance of a particular kind of living thing, or "form of life." According to Foot, the form of life of a living thing can be described by a set of "Aristotelian categoricals" that "speaks, directly or indirectly, about the way life functions such as eating and growing and defending itself come about in a species of a certain conformation, belonging in a certain kind of habitat" (Foot 2001: 33)—e.g., *rabbits are herbivores* or *warblers begin moving south in the autumn*. Once something is determined to belong to a certain biological kind it can be evaluated according to how well it instantiates or expresses the form of life for members of that kind. Foot believes that there is a set of Aristotelian categoricals that characterizes human beings, and that moral evaluation is an instance of this type of natural evaluation: "moral judgment of human actions and dispositions is one example of a genre of evaluation itself actually characterized by the fact that its objects are living things." (Foot 2001: 4)

Foot's development of Geach's grammatical point that "good" and "bad" are attributive adjectives reflects the fact that the kind to which something belongs informs and makes possible evaluative judgments about that thing. Judith Jarvis Thomson, in developing her account of "goodness properties" (Thomson 2008: 61), also relies on Geach's point about "good." For Thomson, this shows that there is no property *goodness* simpliciter, but that there are many properties of the form *being a good K*, for various kinds *K*. We call this form of evaluation, which is informed by the kind to which something belongs, *kind evaluation*. Kind evaluation is a general type of evaluation that can be made of both living and nonliving things. Foot seems to allow for this general type of evaluation, but she distinguishes evaluations of living things from evaluations of artifacts and other nonliving things, claiming that only evaluations of living things have the special "grammar" that interests her. There may be good houses and good soil, but making these sorts of evaluative judgments depends on our interests, in her view, since they concern such things as utility or aesthetic qualities. The sense in which a house is a good house is what Foot calls "secondary goodness" (Foot 2001: 26), which she treats as distinct from "intrinsic" or "natural" goodness. Natural goodness involves a living thing being a good or defective instance of its "form of life," and is independent of any interests or attitudes of the evaluator. Foot claims that moral evaluation is a variety of natural evaluation.

Foot is certainly right that artifacts may be evaluated aesthetically or in terms of utility. But this is also true of living things. An albino rabbit could be beautiful or useful despite being a defective rabbit, just as a building could be beautiful despite being leaky and so defective *qua* building. Aesthetic and utility evaluations are

different from kind evaluations, since the kind into which a thing is classified matters far less to the evaluation. Thus, the important parallels Foot sees between natural and moral evaluation are not, as she thinks, due to a special "grammar" that distinguishes them from artifact evaluation. Rather, they stem from the fact that both are species of *kind evaluation*, which is a particular *form* or *structure* of evaluation that is applicable to almost any entity—natural or artifactual, living or nonliving.

The source of the *standards of evaluation* (or norms) employed in kind evaluation differs based upon the type of kinds involved. Thus, the normative content of kind evaluation varies depending upon what type of thing is being evaluated. This is why "good" and "bad" are attributive adjectives: a common noun designating a kind is needed to supply a standard. In the sections that follow, we distinguish the source of norms used in artifact, natural, and moral evaluation. The biological facts that inform the norms used in natural evaluation do not similarly inform the norms used in moral evaluation, which is why moral evaluation is not a species of natural evaluation (as Foot conceives it) and why ethical naturalism cannot work in quite the way Foot intends. Moral evaluation shares a *formal structure* with natural evaluation, and form of life considerations do inform moral evaluation, but moral and natural evaluation do not share the common source of substantive normative content envisioned by Foot's ethical naturalism. Yet there is still enough that is naturalistic in kind evaluation to satisfy many ethical naturalists, and kind evaluation can provide an account of moral evaluation that is distinct from the sort envisioned by Moore and the non-cognitivists.

3 Artifact Evaluation

Artifacts are things intentionally made by humans, usually with some purpose in mind. Kind evaluation of artifacts involves evaluating them in terms of how well they do what they are supposed to do, or the extent to which they have the features they are supposed to have.[1] If watches are supposed to keep time accurately and chairs are supposed to support a person comfortably when sitting in them, then a good watch will keep time accurately and a good chair will support one's weight comfortably when sitting in it. But keeping time accurately and being comfortable cannot be among the features that make something a watch or a chair. If that were the case—i.e., if it were part of the criteria for belonging to the artifactual kind *watch* or *chair* that watches and chairs actually do these things—then anything that is a watch or chair would *ipso facto* be a good watch or chair. However, there are broken, defective, and lousy watches and chairs. These things are watches and chairs, but they are deficient with respect to what they are supposed to do or how they are supposed to be. Thus, what makes something a watch or a chair is not that it keeps time accurately or supports a person comfortably in a sitting posture, but that

[1] There is a more general use of the term "artifact" on which an artifact is anything that is the outcome of human activities, intended or not. On this meaning of the term, a floating patch of garbage in the ocean is an "artifact." We employ the more restricted use of the term here, since it refers to types of entities that are subject to kind evaluation.

it is *supposed to* do these things. Something can clearly belong to an artifactual category while being a bad or defective instance of it.

It is the possibility of separating the features that determine whether something is *a K* from the features that make it a *good K* that makes evaluation *as a K* possible. Given how readily we are able to evaluate deficient or malfunctioning artifacts as defective instances of their kind, it is clear that the criteria we use for determining that something belongs to an artifactual kind include not so much what things *actually* do as what they are *supposed to* do. In calling an object a clock, we take it to be something that is supposed to keep time accurately. The extent to which it is a good clock depends on how well it does that. Artifacts may thus be evaluated according to the following form:

x is a K
Ks are supposed to be F
x is (or is not) F
x is a good (or deficient) K, with respect to F

Although the features that determine membership in a kind cannot be the same as those that are the basis for evaluation *qua* member of that kind, the kind concepts used to classify artifacts provide or underwrite the standards against which they are evaluated *qua* kind. We have expectations for what clocks should be like. If an object is a clock, it belongs to a kind the members of which are supposed to keep time accurately. A clock that no longer keeps time may still be classified as a clock, albeit a defective clock; however, it may also be classified as a "will return at" sign, in which case it may be quite good. The conception of the kind to which an artifact belongs includes expectations regarding what the artifact is supposed to do or how it is supposed to be. Clocks are things that are supposed to keep time accurately; "will return at" signs are supposed to remain static and be easily readable. There is considerable flexibility with respect to how an artifact is classified, and different classifications will shift evaluation standards for the artifact.

While artifacts may be classified in a variety of ways, there are some constraints. In order for an artifact to be a member of a kind K such that members of K are supposed to be or do F, it is necessary that (1) it is designed to be or do F, a user expects it to be or do F, or someone intends to use it to be or do F; and (2) the object at least approximates something that could be or do F such that the intentions or expectations in (1) are reasonable. The first condition is a disjunction indicating that some intention or expectation is needed for the object to be a K, but this need not be an intention of a designer. A plastic bag might have been designed to make carrying grocery items easier, and not to hold ice to apply to an injury. But this does not preclude it from being categorized as an *ice pack* rather than as a *grocery bag*. Moreover, once categorized as an ice pack, it is subject to ice pack standards. The fact that it is a bad ice pack, because it leaks when holding ice, and that it was never designed to be an ice pack, does not mean it cannot be classified as an ice pack. The second condition shows that classification of an artifact is constrained by the actual features of a thing. It would be a mistake to classify a pair of sunglasses as a computer, since it lacks any capacity for information processing; and it is a mistake

to categorize a car as an earplug, since it is inappropriately sized. The object is not a very bad computer or earplug. It does not belong in that category. So while we do have flexibility in classifying artifacts, not anything goes, and one individual's calling something a K may not suffice for its being a K.

Two points about artifact evaluation, which apply to kind evaluation generally, should be emphasized. First, as mentioned earlier, the features or standards used to evaluate members of a kind are *not* the same as those used to classify objects as members of the kind. What makes something a *K* and what makes something a *good K* must be distinct for kind evaluation to be possible at all. However, second, classificatory criteria have implications for how an object of the kind is *supposed to* be in certain respects. That is, belonging to an artifactual kind carries certain expectations or ends for things of that kind, and those expectations or ends set standards for evaluation that apply to all members of the kind, including those that are deficient with respect to them.[2] All watches are supposed to keep time accurately. The good ones succeed at this; the bad ones do not. What explains our ability to evaluate artifacts in this way is that artifactual kind concepts include, indicate, or imply how instances of the kind are supposed to be or what they are supposed to do in certain respects.

Judith Jarvis Thomson's (2008) account of artifact evaluation is similar in some respects. She begins with the idea that there is no such property as goodness simpliciter, but rather multiple goodness properties relative to kinds. For Thomson, as with the account above, there is a property of goodness *qua* K if (and only if) K is a "goodness-fixing kind," that is, if "what being a K *is* itself sets the standards that a K has to meet if it is to be good *qua* K." (Thomson 2008: 21)[3] *Toaster* is a goodness-fixing kind, since, given that a toaster is an artifact manufactured to toast bread, there is something that constitutes being a good toaster—toasting bread well. However, *pebble* is not a goodness fixing kind, since the definition of being a pebble ["a small, smooth, rounded stone, worn by the action of water, ice or sand"

[2] Foot (2001: 33) hesitates to attribute "ends" to things (like nonhuman organisms) that are not literally *trying* to do something. But that is not the way we mean it here, nor below where we discuss attributing ends to plants and animals. All we mean by an *end* or a *good* is a way something is supposed to be or something that it is supposed to do.

[3] There are similarities as well with Aristotle's view that doing "well, for a flautist, a sculptor, and every craftsman, and, in general, for whatever has a function and [characteristic] action, seems to depend on its function." (Aristotle 1985: 1097b, 25–30) On Aristotle's view, something can be good or bad *qua* kind—whether it is an artisan, plant, body part, or human being—only if it has an associated function (characteristic action), since the standard of evaluation, *qua* kind, is determined by that function: "Now we say that the function of a [kind of thing]—of a harpist, for instance—is the same in kind as the function of an excellent individual of the kind—of an excellent harpist, for instance. And the same is true without qualification in every case, if we add to the function the superior achievement in accord with virtue." (Aristotle 1985: 1098a, 7–12) Aristotle does not use artifacts as examples in his discussion, although commentators often apply his general view to them—e.g., the function of a knife is to cut, and an excellent knife cuts well. However, in the case of artifacts, rather than appeal to functions understood as characteristic actions, they must be connected to the expectations and intentions of users and designers (since artifacts do not perform actions). The basic idea that things are evaluated relative to a standard associated with their kind is one that our view shares with Aristotle's; also shared is the idea that the source of the standard of evaluation *qua* kind differs depending on the variety of kind.

(Thomson 2008: 22)] does not "set the standards that a pebble has to meet if it is to be good *qua* pebble." (Thomson 2008: 22)

What is problematic with Thomson's account is that it seems to conflate *categorization* with *evaluation*. Thomson thinks that to be a good K is to be "a model, exemplar, paradigm, or good specimen of a K." (Thomson 2008: 19) But as we have been at pains to clarify, if being a good K just means being a model or paradigm K, then any clearly articulated kind, including *pebble*, would be goodness-fixing, as there are always better and worse examples. A stone the size of a golf ball is not a good specimen of a pebble, since it is borderline. But this is not sufficient for an evaluative judgment. It is not a defective pebble; it is just not clearly a pebble. Thomson is surely right that *pebble* is not a goodness-fixing kind, and so there is no such thing as being good *qua* pebble; but then having more and less paradigmatic specimens cannot be sufficient for a kind to be goodness-fixing. Goodness as a K—in the *normative* sense—is not the same as being a clear specimen. Categorization of something as a member of a kind and evaluation of it *qua* member of that kind are distinct. But then what is it about a kind that provides evaluation standards? Why are some kind concepts goodness-fixing and others not?

For artifacts, the solution is what we have outlined above. What makes something a toaster is determined by certain intentions and expectations with respect to it, not by what it actually does (within limits). Toasters are things that are intended (by a maker or user) to toast bread. A cast iron skillet used for toasting is (in some respects) a bad toaster. A golf ball-sized stone is not a good specimen of a pebble, but it is not bad *qua* pebble, since all the concept *pebble* provides is criteria for determining whether something is a pebble. There are two important lessons here for any general account of kind evaluation. First, determining whether a thing is a paradigmatic or clear instance of a kind is a non-normative judgment, distinct from the normative evaluation that it is a good or bad member of the kind. Second, *whether* and *how* a kind fixes evaluation standards varies with different varieties of kinds. Thus, without taking a close look at the kind concepts involved, one cannot assume that kind evaluation will work in the same way (or work at all) for artifacts, living things, and moral agents.

4 Natural Evaluation

The centerpiece of what Foot calls "natural" evaluation is that "'natural' goodness…which is attributable only to living things themselves and to their parts, characteristics, and operations, is intrinsic or 'autonomous' goodness in that it depends directly on the relation of an individual to the 'life form' of its species." (Foot 2001: 27) The life-form of a species is characterized, according to Foot, by "Aristotelian categoricals" of the form *S's are F* and *S's do V*—e.g., *rabbits are herbivores* and *rabbits eat grass*. (Foot 2001: 28)[4] The content of Aristotelian categoricals "depend[s] on what the particular species of plants and animals need,

[4] Foot takes the notion of a "life form" characterized by a set of Aristotelian Categoricals from Michael Thompson (Thompson 1995; 2008), though she develops the idea differently for her own purposes.

on their natural habitat, and the ways of making out that are in their repertoire. These things together determine what it is for members of a particular species [or life form] to be as they should be, and to do that which they should do." (Foot 2001: 15)[5]

The structure of Foot's natural evaluation of living things is the same as the structure of kind evaluation of artifacts described above. First, an individual is categorized as a member of a kind (e.g., rabbit, mammal, silver maple); then it is evaluated according to a set of standards that describe how individuals of that kind—*qua* member of the kind—are supposed to be.[6] If it exhibits the features or behaviors that members of the kind are supposed to have, then it is good *qua* member of its kind in that respect. Thus, natural evaluation has the form:

X is a K
Ks are supposed to be F
X is (or is not) F
X is a good (or deficient) K, with respect to F

As with kind evaluation of artifacts, the criteria for membership in a biological kind K must be distinct from the evaluation standards for members of K. What makes a particular rabbit a member of an evaluable kind K is that it belongs to a biological group (delineated by biological criteria such as reproductive relations or genetic similarities) that also shares a common life form, as characterized by a set of Aristotelian categoricals specifying how members of K are supposed to be.[7] As with artifact evaluation, membership in a kind K determines how an object is supposed to be in certain respects, but how it actually is in those respects (whether it is a hopper or a herbivore) cannot be included in the criteria for kind membership. In addition, the standards for evaluation (how individuals of the kind are supposed to be) apply to all members of the kind, whether or not they display the evaluable features. If rabbits are supposed to eat grass then this is true even of a rabbit that eschews grass. Such a rabbit is a bad rabbit, with respect to its diet. This does not imply that there is anything *wrong* with being a bad member of one's kind; in some situations or environments it might even be *good for* the organism to be bad *qua* rabbit.

While artifact and natural evaluation share a common form, they diverge substantially with respect to the source of their normative content. We sort artifacts into kinds based on certain intentions or expectations with respect to them. It is because these expectations are built into our artifactual kind concepts that such kinds set standards for how their members are supposed to be. This is not the case with living things. To see how normative content is generated in natural evaluation,

[5] See also: "the Aristotelian categoricals give the 'how' of what happens in the life cycle of that species. And all the truths about what this or that characteristic does, what its purpose or point is, and in suitable cases its function, must be related to this life cycle. The way an individual *should be* is determined by what is needed for development, self-maintenance, and reproduction." (Foot 2001: 32–33)

[6] "Thus, evaluation of an individual living thing in its own right, with no reference to our interests or desires, is possible where there is intersection of two types of propositions: on the one hand, Aristotelian categoricals (life-form descriptions relating to the species), and on the other, propositions about particular individuals that are the subject of evaluation." (Foot 2001: 33)

[7] For a defense of such kinds as legitimate classifications of organisms, see Crane and Sandler (2011).

we must look at how living things are categorized and at what determines the standards for how they are supposed to be.

As with artifacts, living things may be classified in a variety of ways. A particular organism might be categorized as a member of a species according to phylogenetic, ecological, or reproductive criteria. Moreover, a living thing can be categorized at a variety of taxonomic ranks other than species—e.g., genus or family. Any of these classifications may generate evaluable kinds. As with any classification system, there are constraints and not every categorization is acceptable. At a minimum, organisms should be sorted into kinds that are distinguished by biological criteria, and that serve some explanatory purpose.[8] While we do sometimes classify living things based on people's intentions with respect to their use (e.g., game bird, medicinal plant, cash crop), such classifications will not yield natural evaluations in the sense Foot is trying to capture, but something closer in content to artifact or utility evaluations. Our interests in hunting and eating certain birds influence what counts as good or bad game birds, but this is not a matter of *natural* goodness.[9] For natural evaluation, living things are sorted into biological groupings—i.e., species and other taxa that track genealogical, phylogenetic, ecological, morphological or other biological features of organisms and populations.[10] These biological groupings need to generate evaluation criteria applicable to all members of the group. Being good *qua* tiger is not simply a matter of being a clear, paradigm, or non-borderline specimen of a tiger, as Thomson (2008) suggests. Something clearly a tiger may be a defective one. So how can biological groupings generate evaluative standards?

As we have seen, evaluative standards for artifacts are an immediate consequence of the ways they are categorized. An object is supposed to keep time because it is a clock and that is what clocks are supposed to do. The evaluative standards are built into artifactual kind concepts based on our intentions and expectations with respect to them. They apply to all members of the kind because anything appropriately classified as, e.g., a clock, is supposed to keep time. In natural evaluation, the source of the Aristotelian categoricals, which supply the evaluative standards for living things, is not so direct. Nor is the manner in which these standards are applied to all members of a kind. Our biological kind concepts do not have standards for evaluation built into them based on our intentions and other attitudes regarding them.

Foot's idea is that the ways in which particular groups of organisms are supposed to be is connected to their "life-cycle" and how they pursue and realize "self-

[8] Species pluralism, the view that there are multiple legitimate species concepts, and so multiple ways to classify organisms, has been defended in a number of places, including Crane and Sandler (2011), Dupré (1993), Ereshefsky (2001), and Kitcher (1984; 1987). Our version allows considerable flexibility in classification, due to the varied classificatory interests and the different explanatory projects involving living things in which people are engaged.

[9] Thomson's (2008) example *seeing eye dog* seems to be in this category. That is, our evaluations of seeing eye dogs are much like our evaluations of artifacts (like toasters) in that the evaluative standards are largely determined by our intentions and expectations with respect to the kind.

[10] This is not to say that the biological kinds that supply the standards for natural evaluation must be generated by a conception of species typically employed by biologists. (Crane and Sandler 2011)

maintenance and reproduction" (Foot 2001: 33). She considers self-maintenance and reproduction to be natural ends common to all living things, and the way an organism is supposed to be is a matter of how members of its biological kind go about accomplishing these ends, when they succeed in doing so. Philosophical attempts to justify attributions of ends to organisms usually appeal to an etiological notion of biological function. (Wouters 2005; Wright 1973; Millikan 1989, 1999; Neander 1991, 2008; Basl and Sandler 2013) On such an account, the function of a trait is the effect that explains why the trait is there, i.e., the effect that explains why organisms with the trait passed it on to their progeny. This is thought to justify such teleological notions as what particular traits are for, health and disease, and function and dysfunction. Foot eschews such philosophical accounts of function in favor of more "everyday uses" of the term. (Foot 2001: 32n) Ordinary observers, ethologists and naturalists routinely attribute ends such as self-maintenance and reproduction to living things independently of an etiological or other philosophical account of function; indeed the practice well predates the theoretical apparatus of the etiological account. This ordinary attribution of the ends of self-maintenance and reproduction to living things is based on observations of their expending energy toward such states and behaving as if they have such ends. Attributions of more specific ends to organisms, e.g., *rabbits are supposed to eat grass*, come from the ways we sort living things into kinds based on characteristic ways of achieving the general organismic ends of self-maintenance and reproduction. Biological groups, such as the one commonly known as *rabbits*, have characteristic ways of maintaining themselves and reproducing. Rabbits maintain themselves by feeding on grass. Such forms and behaviors may not be displayed by all (or even most) members of the group, but are the means by which the general organismic ends are met, when they are met in that biological group. They count as ends for the biological group, subordinate to the more general organismic ends of survival and reproduction. Having such natural ends amounts to no more than being an organism (an entity characterized by metabolic processes that facilitate self-maintenance and reproduction) of a kind that employs its metabolic processes and expends resources and energy in characteristic ways toward self-maintenance and reproduction.

Because groups of organisms are delineated by biological criteria (which may be morphological, phylogenetic, etc., and at a variety of taxonomic ranks) the more specific ends apply to every member of the group, not because all or even most of them actually do display these characteristics and behaviors (hardly any sea turtles survive to adulthood), but because they are the means by which the ends of self-maintenance and reproduction are typically accomplished in the biologically delineated group when they are in fact accomplished. As with artifact evaluation, the classificatory criteria and the evaluative criteria are distinct. The evaluative criteria (i.e., the form of life account of how entities of that type are supposed to be) apply to every member of the kind, where membership is determined by satisfaction of the classificatory criteria (i.e., the basis for the biological grouping).

5 Moral Evaluation

Foot's attempt to extend the structure of natural evaluation to moral evaluation has found many critics. (Copp and Sobel 2004; FitzPatrick 2000; Millum 2006) One line of critique, developed by both Millum and FitzPatrick, is that natural evaluations require an historical account of function, and the attempt to carry such an account of function over to moral evaluation cannot be squared with any reasonable ethic. Millum argues for an etiological account of function according to which the function of a trait is to bring about the effects for which it was selected. For FitzPatrick, the ultimate biological end for any given organism is "the intergenerational replication of certain germ-line copies of genes of the types represented in the organism's co-adapted genome." (Fitzpatrick 2000: 104) Both complain that Foot's "common sense" ahistorical account of function provides little guidance regarding how functions are determined. In their view, if evolutionary history is ignored, then it is not possible to distinguish genuine functions and ends from other, merely incidental, effects. But once an appropriate account of function is adopted, they argue, the extension of natural evaluation to moral evaluation becomes implausible. "Being perfectly virtuous does not promote the fitness of human beings in general." (Millum 2006: 212) "No sane ethical view will hold the structure of proper human ends…hostage to the contingencies of our natural selection history." (FitzPatrick 2000: 227)

However, this criticism applies only if the normative *content* of moral evaluation is derived etiologically or from biological fitness. It does not follow from the fact that moral evaluation and natural evaluation share a common *form* that moral ends are grounded in the same manner as biological ends. The form or structure of evaluation can be shared by all varieties of kind evaluation (artifact, natural, and moral) even as the source of the normative content is not. In this section we show that moral evaluation is not a species of natural evaluation, but rather shares the same form, a form also common to artifact evaluation. Thus our view is not threatened with the implausible consequence that moral ends depend on accidents of human evolutionary history.

For Foot, a key element of the evaluation of human behavior is the fact that humans are *practically rational*. There is much packed into Foot's notion of practical rationality. For starters, practical rationality is a distinctive feature of human cognition that is not shared with other animals. In her discussion of the "great difference between human beings and even the most intelligent of animals" Foot explains: "while animals go for the good (thing) *that they see*, human beings go for *what they see as good*: food, for example, being the good thing that animals see and go for and that human beings are able to see as good…Human beings not only have the power to reason about all sorts of things in a speculative way, but also the power to *see grounds* for acting in one way rather than another; and if told that they should do one thing rather than another, they can ask *why* they should." (Foot 2001: 56)

Practical rationality, in the sense described here by Foot, is a family of cognitive abilities. It includes the distinctly human ability to see things as *good* or *worth pursuing*, the ability to consider how one *should* act, and the ability to see that

actions may be *justified* or not. These cognitive abilities involve more than the reasoning abilities that we share to some extent with other animals, such as means-end reasoning and risk-reward judgments. They allow us to think normatively. They also play a significant role in the ways that successful human beings achieve their natural ends of self-maintenance and reproduction. For example, normative and justificatory thinking enables us to live successfully in communities. A human being who, at no point in its life-cycle, has the ability to reason in these ways—perhaps a "pathological amoralist" or someone who does not develop cognitively past the stage of a young child—would be a defective human being in that respect. Foot is correct that as a matter of *natural* evaluation human beings are supposed to be practically rational (in this sense), and that a human being who lacked the ability to see things as good, to consider how one should act, or to see that there are justifying reasons for acting, may be defective *qua* human being. We could evaluate such a human being thus:

X is a human being
Human beings are supposed to have practical rationality (a set of cognitive abilities)
X does not have practical rationality
X is a deficient human being, with respect to practical rationality

However, this is not a moral evaluation. A pathological amoralist or severely cognitively disabled person is not morally bad, but lacks the requisite abilities to be an appropriate object of moral evaluation. Such humans are not moral agents, and in that respect are defective *qua* human beings, as a matter of natural evaluation.

The first difference between moral and natural evaluation of humans concerns the kind to which moral evaluation is appropriate. Since not all human beings are appropriate objects of moral evaluation (because some lack the cognitive capacities associated with practical rationality), we evaluate humans morally *qua* human moral agents, not *qua* human beings. Human moral agents can think normatively: They can understand moral concepts, formulate principles using those concepts, apply concepts and principles in concrete situations, and deliberate on what those concepts and principles imply with respect to action. Infants and severely mentally disabled humans are not virtuous or vicious and they are not morally good or morally bad, because they are not appropriately grouped into a morally evaluable kind. (Taylor 1986) Thus, *human being* is not a morally evaluable kind, though individuals of kind *human moral agent* are morally evaluable. The kind *human moral agent* is as legitimate a kind as the biological categories that serve the purposes of biologists. There are certainly human organisms that have the cognitive abilities associated with practical rationality, so the kind classifies human organisms according to real properties that some of them possess. The kind *human moral agent* serves the purposes of picking out the proper individuals for moral evaluation, since it distinguishes those human beings with the cognitive capacities that enable them to be morally responsible.[11] In the same way that the phylogenetic species concept is

[11] Non-human moral agents, including artificially intelligent moral agents are also possible. This is another reason why morally evaluable kinds are not biological categories.

employed in evolutionary biology, the choice to use this kind (human moral agent) is determined by its being appropriate to the project at hand (moral evaluation).

The other significant difference between moral and natural evaluation is the source of the normative content, or the "supposed to" claims. In kind evaluation, the evaluable kind informs in some way the evaluative standards for things of that kind. As we saw in natural evaluation, this need not be as direct as it is in artifact evaluation, where the standards are built into the kind concepts. A feature common to all human moral agents is that, *qua* moral agents, they can value things as ends other than their own survival and reproduction—e.g., friendship, power, status, possessions, comfort, pleasure, beauty, justice, truth, nature—and they can reason about whether and how both means and ends are justified. Another feature common to all human moral agents is that what constitutes good reasons or justifications is sometimes informed by their humanity—e.g., that they are social and environmentally dependent. Thus, human moral agents are humans that strive to live well (flourish) in well-justified ways given our form of life. In the same way that biological organisms are entities that expend energy toward the ends of self-maintenance and reproduction, human moral agents are entities that strive toward endorsable forms of human flourishing and realizing other well-justified ends. They employ their cognitive capacities to discern what counts as living well and the appropriate means of doing so. Human flourishing thus becomes a general end for human moral agents, which informs the "supposed to" claims of moral evaluation.

There are some constraints on what constitutes human flourishing, and certainly human moral agents can be wrong in their assessment of the good life. As noted above, a substantive account of *human* flourishing will need to be sensitive to features of the biological kind *human being,* including such facts as that humans are social, rational (including practically rational), and cultural animals. This is why things like reliable social relationships and knowledge are part of the good for human beings. In addition, a substantive account of human flourishing will need to be sensitive to features of the kind *human moral agent,* including the fact that human moral agents can consider not only what constitutes human flourishing, but can also theorize about *why* such goods make for human flourishing. So while there may be some variation in the goods that lead to human flourishing, as well as significant variation in the means of realizing them, not everything that human moral agents come to value is in fact part of our good or an endorsable end, and not every way of realizing goods is justifiable. In order to discern the constituents of and means to flourishing (and other worthwhile ends), human moral agents are supposed to use practical rationality *well*—e.g., consider alternative viewpoints, avoid epistemic pitfalls like tunnel vision, maintain consistency, and attend to all relevant information. Using practical rationality well becomes the fundamental thing that human moral agents, *qua* human moral agents, are supposed to do.[12] This "supposed to" claim generates the following form for moral evaluation:

[12] Well-used practical rationality may involve recognizing that the grounds for concern about one's own flourishing apply as well to the flourishing of others, such that rational consistency requires that the ends that human beings are supposed to aim for include both their own flourishing and that of others. (Sandler 2007; Swanton 2003)

X is a human moral agent
Human moral agents are supposed to *use well* their practical rationality
X does (or does not) use practical rationality well
X is a good (or deficient) human moral agent

Foot sometimes uses "practical reason" in this more substantive sense, in which having practical reason is not merely having the cognitive abilities to think normatively, but using practical reason well. (Foot 2001: 8) Human moral agents are supposed to employ their practical reason not only to discover human goods and other worthwhile ends, but to find ways to accomplish or realize them, and to act accordingly. But the ways in which human goods can be realized can vary greatly. The forms of social relationships and organizations that are possible for humans are diverse (in comparison with other species), and so too are the ways of raising young and producing goods. There is not one way that humans are supposed to go about the world with respect to realizing goods. So while it is true that *reliable interpersonal relationships are good for humans*, there is no single human way that we are supposed to organize ourselves into relationships. All that can be said in general is that human moral agents are supposed to organize in ways that they *rightly see as good* (i.e., in accordance with *well-used* practical rationality.)

Realizing human goods and other worthwhile ends ultimately depends upon our behaving in certain ways and having certain character traits (or at least is more readily accomplished given such traits and behaviors). This is the sense in which it is *practically rational* for us to do those things and to be those ways. Since meaningful and reliable social relationships (whatever their form) typically depend on trust and honesty, for example, we should be trustworthy and honest. As Foot puts it, "Men and women need to be industrious and tenacious of purpose not only so as to be able to house, clothe, and feed themselves, but also to pursue human ends having to do with love and friendship." (Foot 2001: 44) Being industrious, honest, trustworthy, tenacious, and compassionate are well-justified (or practically rational) for creatures like us (for whom strong social relationships, knowledge, autonomy, and subjective well-being are goods), since these traits are most conducive to realizing human goods in endorsable forms.[13] Therefore, human moral agents are supposed to be honest, compassionate, and so on.

As with kind evaluation for artifacts and living things, classificatory criteria for the evaluable kinds are distinct from the evaluation criteria. To be a human moral agent one must have the cognitive ability to think normatively—the capacities constitutive of practical rationality—in addition to being (biologically) a human being. To be a *good* human moral agent, one must use these capacities well—i.e., in the service of realizing human flourishing and other endorsable ends in well-justified ways and forms. This is true of all humans who count as moral agents, even those who fail in these respects. While the form of moral evaluation is shared with

[13] On this view, the virtues are character traits that are most conducive to our realizing human goods and other worthwhile ends (e.g., justice, the flourishing of others, protection of natural value) in rationally endorsable ways. Which character traits are, in fact, most conducive depends in part on the sort of creatures we are, as well as on the environment in which we live. Thus, deriving the substantive standards for moral evaluation has an empirical, or naturalistic component. (Hursthouse 1999; Sandler 2007)

natural and artifact evaluation, the content of moral evaluation differs from both. How human moral agents (the kind) are supposed to be and what they are supposed to do is not determined by intentions and expectations (as with artifacts), nor by the biological facts about the kind (as with non-human living things and natural evaluations of human beings). Instead, the ends (or goods) of human moral agents are informed by our biological nature, including our well-used practical rationality, the conditions of moral agency, and the practice of morality.

6 Ethical Naturalism and Cognitivism

Foot's project was supposed to provide a naturalistic account of moral goodness by explaining moral evaluation as a species of natural evaluation. In maintaining that moral evaluation is not a species of natural evaluation, but rather shares a common form with it, have we stepped away from ethical naturalism? There are a variety of flavors of ethical naturalism, and indeed we do not think that our version works in quite the way Foot intended. On our view, the kind to which moral evaluation is appropriate is not a "natural" kind in the sense of being a biological grouping or even a category standardly employed by natural scientists. It is a kind that is determined by what the practice of morality involves—i.e., moral agency and practical rationality. Moreover, we have maintained that the normative content of moral evaluation is not a consequence of the human form of life alone, and we have not attempted to give a reductive account of human moral goods, since on our account such goods are not subordinate to or derived from the general biological ends of survival and reproduction. Instead, the standard of evaluation for the kind *human moral agent*—the normative content—is informed by substantive accounts of human flourishing and the conditions of moral agency. Nevertheless, we still see the account as broadly naturalistic, for the following reasons.

First, human moral agents are biological organisms, and practical rationality is an evolved biological capacity. Moreover, though a substantive conception of ethics—of what it means to be morally responsible and what is required for moral agency—plays a role in informing the normative content of ethical evaluation, ethical theorizing is itself a product of well-used practical rationality, which again is a biologically grounded capacity. Nowhere in our account is there an appeal to anything unnatural, supernatural or nonnatural.

Second, it matters what sort of creatures we are. It is relevant that humans build dwellings, make clothes, and are social. (Foot 2001: 51) If we were not social or environmentally vulnerable and dependent, for example, then the ways we are supposed to behave and the traits that we are supposed to have—those that would be well-justified for us—would be quite different. Endorsable forms of human flourishing and other well-justified ends are significantly informed by our biological characteristics.

Third, moral supervenience is not violated. A break with moral supervenience, by allowing a normative difference without any descriptive difference, would push an ethical theory toward non-naturalism. On our view, any difference in the moral goodness or badness of a human moral agent (as expressed in the conclusion of a

moral evaluation) would require a difference in the way that the agent uses his or her practical reason, a difference in the character traits that he or she possesses, or a difference in his or her actions, all of which are descriptive facts.

Another worry is that we may have drifted toward non-cognitivism. But we have followed Foot in thinking about practical rationality as a cognitive ability. It is the ability to see reasons for action, and the ability to see actions as justified or not. We have also followed Foot in thinking that judgments of goodness and defect (whether natural or moral) can be inferred from the properties of an individual of a certain kind together with the ways members of that kind are supposed to be—in the case of human moral agents, practically rational in pursuit of human flourishing and other endorsable ends. What counts as good and bad human character is not a matter of our subjective attitudes, but is a judgment that involves evaluating human moral agents against a defined standard. Thus, our account of moral evaluation as a variety of kind evaluation remains an effective response to both non-naturalism and non-cognitivism.

7 Conclusion

Foot is correct that moral evaluation and natural evaluation share a common form. But it is not, as she thinks, because there is a special type of evaluation that is attributable only to living things, evaluation based on the life form of individuals as members of a species. Instead, there is a more general type of evaluation—kind evaluation—that can be made of artifacts, living things, and human moral agents. Foot is also correct that, when it comes to kind-based evaluation, the facts about how members of the kind are supposed to be or supposed to go about the world are crucial. But this is not a special feature of moral or even natural evaluation. It is a feature of kind evaluation generally. What a thing is supposed to do or how it is supposed to be is dependent on facts about its kind, whether the kind is moral, natural, or artifactual. And Foot is correct that when the relevant kind for moral evaluation is considered, what members of the kind are supposed to do is to act in accordance with their well-exercised practical reason.

However, Foot is mistaken in thinking the relevant kind for moral evaluation is the same that is appropriate to evaluations with respect to health. Instead of "the human form of life," the appropriate kind for moral evaluation is *human moral agent*. She is also wrong to think that a substantive account of the goods or ends for human moral agents can be given by looking at the human form of life alone, as it also requires a substantive account of the conditions of moral agency. Certainly we are biological creatures, and our biological nature is relevant to what it is rational for us to do and how it is rational for us to be, but we cannot derive moral evaluation entirely from facts about biology, evolutionary history, or current practices. We must also look to what it means to be a moral agent, and the ways that human moral agents use their practical rationality in pursuit of living well.

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